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| 10/590,698 | 08/25/2006 | Darren Kidney | P30345 | 4508 |
| 7055 7590 05/11/2011 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 | | | | |
| EXAMINER | | | | |
| BELLINGER, JASON R | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3617 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary

Application No.

10/590,698

Applicant(s)

KIDNEY, DARREN

Examiner

JASON R. BELLINGER

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-37 is/are allowed.
- 6) ☒ Claim(s) 13-28 is/are rejected.
- 7) ☒ Claim(s) 29 and 38-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 13-17, 22-23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of Servaes (DE 1,021,738).

The Dunlop reference shows a sealing ring for a wheel having all of the structure as set forth in the above claims, except as follows:

The Dunlop reference does not specify the dimensions of the sealing ring 5 with respect to the tire beads 3. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the sealing ring of the reference with dimensions suitable to properly function when inserted into a wheel assembly, i.e. sealing the tire against the rim.

The Dunlop reference does not specify that the deformable sealing elements (adjacent grooves 7) project from an inner surface of the flexible limbs. Servaes teaches the use of sealing elements that project from a surface of a sealing ring 4. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the deformable sealing elements of the Dunlop reference as a projection from the inner surface of the flexible limbs as an alternative configuration, in order to increase the sealing effect of the sealing ring by allowing more surface area of the sealing elements to contact the tire beads when installed.

While the Dunlop reference as modified by Servaes does not show the grooves between the sealing elements being rounded or the free ends of the sealing elements being rounded, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the grooves and free ends in any shape, dependent upon the manufacturing process used, and the aesthetic appearance desired.

3. Claims 18-19, 21, 24, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of Servaes (DE 1,021,738) as applied to claims 13-17, 22-23, and 26 above, and further in view of Veux et al. The Dunlop reference as modified by Servaes does not show the sealing ring 5 including a reinforcing member formed on the central annular body. In Figure 7, Veux et al teaches the use of a sealing ring having a reinforcing member 70 formed on a central body portion. This reinforcing member 70 is a radial elevation or rib on the radially outer side of the body. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing ring 5 of the Dunlop reference as modified by Servaes with a rib, for the purpose of providing reinforcement to the sealing ring.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of Servaes (DE 1,021,738) and Veux et al as applied to claims 18-19, 21, 24, 27-28 above, and further in view of Medynski. The Dunlop reference as modified by Servaes and Veux et al does not show a hollow space

provided in the reinforcing member. Medynski teaches the use of a sealing ring 10 having a reinforcing member 15-16 with a hollow space therein. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rib of the sealing ring of the Dunlop reference as modified by Servaes and Veux et al with a hollow space, for the purpose of reducing the weight of the ring without sacrificing strength or resiliency.

Allowable Subject Matter

5. Claims 29 and 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 30-37 are allowable over the prior art.

Response to Arguments

7. Applicant's arguments filed 23 February 2011 have been fully considered but they are not persuasive. The Applicant argues Dunlop (GB 787,784) does not show the sealing ring in an un-installed state, and thus it is unclear whether Dunlop shows deformable sealing elements. However, Dunlop shows grooves 8 formed in the arms 7. The arms are made of rubber, which is a deformable material. Therefore, it is obvious that the rubber material between the grooves 8 is capable of deforming to seal against the tire bead. Also, it should be noted that Servaes (DE 1,021,738) was used to teach

the structure of the sealing elements (i.e. projecting from a surface). Therefore, one of ordinary skill in the art would find forming the rubber material between the grooves 8 of Dunlop as projecting deformable elements would predictably increase the sealing surface area of the seal element against the tire.

8. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In this case, the Appellant argues that deformable members 4 of Servaes (DE 1,021,738) extend axially, and thus apply an "essentially axial" force to the beads 2; while the grooves 8 of Dunlop (GB 787,784) apply an "essentially radially inwardly directed" force to the beads 3. The fact that the sealing elements of Servaes extend axially is irrelevant, given the fact that Dunlop shows the grooves 8 and sealing elements therebetween being located on the radially inwardly pointing surface. The references were not literally combined. Namely, Servaes was only used to teach the use of protrusions extending from a surface of a sealing ring. Dunlop shows the remainder of the claimed structure of the sealing ring. Furthermore, the rejection sets

forth how one of ordinary skill in the art would find the protrusions of Servaes equivalent substitute structure to the grooves of Dunlop. It should further be noted that the Appellant has not provided any evidence that the combination is incapable of functioning in the same manner as set forth in the claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON R. BELLINGER whose telephone number is (571)272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/
Primary Examiner
Art Unit 3617